# OPINION 1314 HYDROPHORUS NEBULOSUS FALLÉN, 1823, IS THE TYPE SPECIES OF HYDROPHORUS FALLÉN, 1823 (INSECTA, DIPTERA)

RULING.—(1) Under the plenary powers, all designation of type species hitherto made for the nominal genus *Hydrophorus* Fallén, 1823, are hereby set aside and *Hydrophorus nebulosus* Fallén, 1823 is hereby designated as type species of that genus.

(2) The generic name *Hydrophorus* Fallén, 1823 (gender: masculine), type species, by designation under the plenary powers in (1) above, *Hydrophorus nebulosus* Fallén, 1823, is hereby placed on the Official

List of Generic Names in Zoology with the Name Number 2258.

(3) The specific name *nebulosus* Fallén, 1823, as published in the binomen *Hydrophorus nebulosus* (specific name of type species of *Hydrophorus* Fallén, 1823) is hereby placed on the Official List of Specific Names in Zoology with the Name Number 2957.

(4) The subfamily name HYDROPHORINAE Lioy, 1864 or Schiner, 1864 (type genus *Hydrophorus* Fallén, 1823) is hereby placed on the Official List of Family-Group Names in Zoology with the Name Number 569.

### HISTORY OF THE CASE Z.N.(S.)2036

An application for the use of the plenary powers to fix the type species of *Hydrophorus* Fallén, 1823 was first received from Dr George Steyskal (*Systematic Entomology Laboratory, USDA, c/o U.S. National Museum, Washington D.C. 20560*) and others on 1 March 1973. The subsequent history of the case was told in the following report that was sent to the members of the Commission with Voting Paper (84)41:

# HYDROPHORUS FALLÉN, 1823: REPORT ON A MAJORITY VOTE LESS THAN A TWO-THIRDS MAJORITY

The main point at issue in this case is the choice of type species for the nominal genus *Hydrophorus* Fallén, 1823. In this genus of aquatic Diptera the arista of the antennae is dorsal, whereas in the related genus *Medetera* 

Fischer, 1819, it is apical.

2. In *Bull. zool. Nom.* vol. 30, pp. 118–120, Steyskal and others showed that Macquart, 1827, had designated *H. jaculus* Fallén, 1823, one of the originally included species, as type of *Hydrophorus*. They claimed that there was a misidentification in this designation, because in *H. jaculus* the arista is apical as it is in the type species of *Medetera, M. carnivora* Fischer, 1819, and its two senior synonyms, *Musca rostrata* Fabricius, 1775, and *Musca diadema* Linnaeus, 1787. Reference to the Commission was therefore obligatory under Article 70a of the Code. Macquart had, in effect, synonymised *Hydrophorus* and *Medetera*. In consequence, the genus in

which the arista is dorsal would have to be called *Aphrozeta* Perris, a name used only once (by Coquillett, 1910) since its publication.

3. [This paragraph showed that the date of Aphrozeta is to be cited

as 1850 and is not relevant in the present context.]

- 4. To avert the consequences outlined in paragraph 2 of this report, Steyskal and others asked that the plenary powers be used to set aside all designations of type species for *Hydrophorus* and that *H. nebulosus* Fallén, 1823 be designated as type. This is one of the originally included species and its arista is dorsal.
- 5. In Bull. zool. Nom. vol. 31, pp. 173–177 Hendrickson & Roback commented on the application by Steyskal and others. They agreed that Macquart's designation of H. jaculus should be set aside, thus implicitly accepting the need to conserve Hydrophorus as the name of the genus in which the arista is dorsal, and they agreed that, if this was not done, Hydrophorus would have to be replaced by the practically unused Aphrozeta. They opposed the choice of H. nebulosos as type species because they thought it was an aberrant species, and proposed H. binotatus Fallén, 1823 in its place.

6. In Bull. zool. Nom. vol. 32, pp. 79-80 Steyskal replied that H. nebulosus, apart from its additional wing spots, was in fact entirely compatible with the traditional concept of Hydrophorus. He said that H. binotatus, on the other hand, not only showed some unusual features but was easily

confused with another species.

7. Hendrickson & Roback had claimed that there was no misidentification involved in Macquart's designation of *H. jaculus*. Their request for the use of the plenary powers to designate *H. binotatus* was therefore based solely on the need to conserve *Hydrophorus* in its accepted sense. However, the arguments they adduce on this side of their case are not strong. They merely show that Macquart had accepted an earlier (1824) error of Meigen's in dealing with *Medeterus* (sic) and *Hydrophorus* and do not seriously weaken the argument of Steyskal and others on this point.

8. On 24 February 1977 the members of the Commission were invited to vote on V.P.(77)9 either for the proposals of Steyskal and others (Alternative A) or for those of Hendrickson & Roback (Alternative B). At the close of the voting period on 23 May 1977 there were 13 votes for Alternative A and 9 for Alternative B—a majority less than a two-thirds

majority for Alternative A.

9. The matter therefore comes down to a simple choice as to which of two species—H. nebulosus Fallén, 1823, or H. binotatus Fallén, 1823—is to be the type species of Hydrophorus. This is a taxonomic choice, and I have therefore been seeking independent specialist advice to guide the Commission. Dr C. E. Dyte (Ministry of Agriculture Slough Laboratory, Slough, U.K.) had already supported Steyskal and others. Eventually, in August 1983, with the help of Mr R. W. Sims (British Museum (Natural History), London) and Dr Kerzhner (Zoological Institute, Leningrad), Professor O. P. Negrobov (Voronezh University, U.S.S.R.) wrote to say that

he too supported the choice of H. nebulosus as type species 'as it does not differ greatly from other species of the genus, including the hypopygium (Negrobov, 1977, in Lindner, Die Fliegen der palaearktischen Region, Lief, 316, figs 1127–1130). The external difference in wing spots is not important.'

#### DECISION OF THE COMMISSION

The above report was sent, with Voting Paper (1984)41, on 13 September 1984 to the members of the Commission for a vote under the Three-Month Rule. At the close of the voting period on 13 December 1984, the state of the voting was as follows:

Affirmative Votes for H. nebulosus: twenty-one (21), received in the following order: Melville, Holthuis, Cocks, Brinck, Hahn, Mroczkowski, Willink, Trjapitzin, Halvorsen, Uéno, Starobogatov, Sabrosky, Alvarado,

Kraus, Ride, Corliss, Schuster, Bayer, Heppell, Dupuis, Binder

Affirmative Votes for H. binotatus: none (0) Negative Votes, Late Votes, Abstentions: none (0).

No voting papers were returned by Bernardi, Cogger, Lehtinen and Savage.

#### ORIGINAL REFERENCES

The following are the original references for the names placed on Official Lists by the ruling given in the present Opinion:

binotatus, Hydrophorus, Fallén, 1823, Monographia Dolichopodum Sveciae,

HYDROPHORINAE Liov, 1864, Atti r. Ist. Veneto Sci., Lett. Arti (3), vol. 9, p. 762

Hydrophorus Fallén, 1823, Monographia Dolichopodum Sveciae, p. 3 nebulosus, Hydrophorus, Fallén, 1823, Monographia Dolichopodum Sveciae, p. 3.

#### CERTIFICATE

I hereby certify that the votes cast on V.P.(84)41 were cast as set out above, that the proposal contained in that voting paper has been duly adopted under the plenary powers, and that the decision so taken, being the decision of the International Commission on Zoological Nomenclature, is truly recorded in the present Opinion No. 1314.

## R. V. MELVILLE

Secretary

International Commission on Zoological Nomenclature London

17 January 1985